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(54) **System and method for displaying of colour images.**

(57) A system and method are provided for utilizing, in a colour imaging environment, such as ray tracing, display adapter hardware which is capable of interpolating colour values for pixels lying in an area between previously colour imaged pixels. A computer system CPU performs ray tracing calculations, or the like for a pre-determined number of the total pixels, rather than each pixel, as is the case with conventional ray trace image systems. The system CPU then turns over the colour imaged pixels to a display adapter, capable of colour interpolating therebetween. In this way, previously idle display adapter hardware can be utilized to determine pixel colour values and allow the system CPU to continue colour imaging other more critical areas of a scene to be displayed. Therefore, an image can be rendered at a much faster rate than possible with conventional systems, with relatively no visible loss in quality.

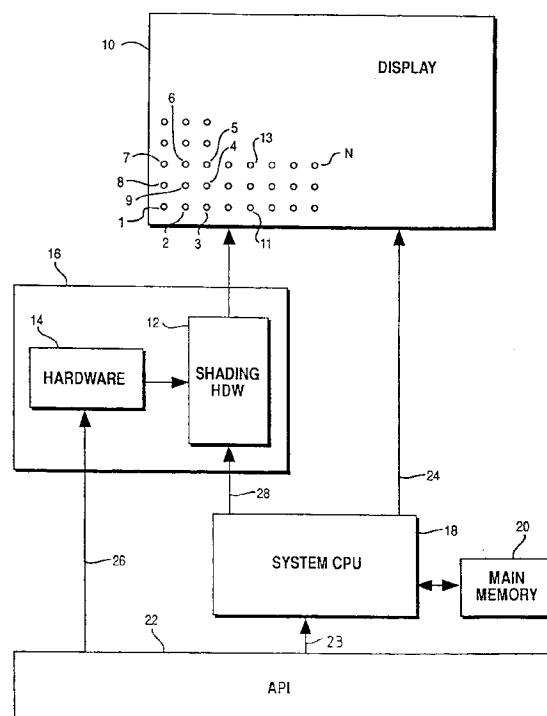


FIG. 1



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number

EP 91 30 1074

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	COMPUTER GRAPHICS vol. 18, no. 3, July 1984, NEW-YORK U.S. pages 119 - 127 HECKBERT AND HANRAHAN 'BEAM TRACING POLYGONAL OBJECTS' * page 122, right column, line 15 - line 33 *	1-10	G06F15/72
X	EUROGRAPHICS 4 September 1989, AMSTERDAM pages 39 - 50 AKIMOTO ET AL 'PIXEL SELECTED RAY TRACING' * page 40, line 25 - line 42 * * page 42, line 4 - line 16; figures 1-2 *	1-6	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			G06F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21 JANUARY 1993	Examiner BURGAUD C.
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>&amp; : member of the same patent family, corresponding document</p>			

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